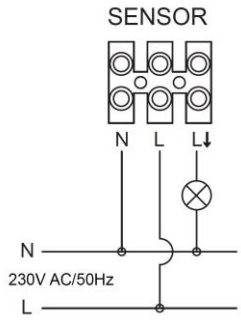
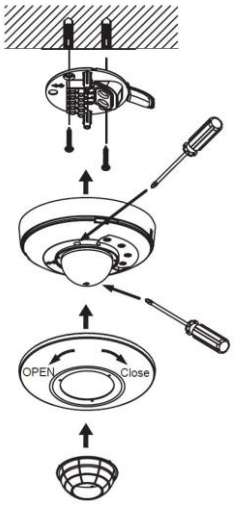
User Manual Motion Detector Infra Garde 360 AP Acoustic

Warning!
- Any work on the main power supply must only be completed by trained specialists.
- The product must be installed in accordance with installation guidelines/standards specific to your country.
- Disconnect the 230V power supply before starting the installation process.
- The device's power supply must always be fitted with a (250VAC, 10A) type C fuse in accordance with EN60898-1.
- The device must not be installed on conductive surfaces.
- The device is suitable for indoor installation only.
- Disconnect power prior to replacing a lamp.
- Faulty lamps may cause a short-circuit and thereby permanently damage the device.
- To ensure the operational reliability of the detector, keep a minimal distance of 1m to lamps installed on the same height level.
- Lamps installed underneath the detector or in the detection area may impair functionality. Keep away from heating devices.
- In case of malfunction, such as continuous lighting, or false triggering please refer to the troubleshooting section on this page.

Function
The detector reacts to the motion of heat (positive or negative in relation to the environment). If a person approaches the monitored area, the device will turn on the connected light automatically. If the person leaves the area, the light will be switched off after the preset duration (short impulse, 30 sec. to 30 min.). The in-built microphone extends the delay time while lights are still on as well as during a maximum 10 seconds after lights switch off. The connected light will be turned on only when the ambient light value is below the adjusted value.

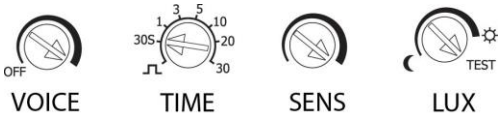
Installation
Install the device at a height of approx. 2 to 4 m, away from heat sources, trees and light reflecting areas. Wire the detector as follows:





phase / outer conductor (L) brown;
neutral-/ neutral conductor (N) blue;
switching output / switched phase/ outer conductor (L') red.

Screw and tighten the detector to the ceiling. The device is operational after approx. 1 minute from connecting to mains voltage.



VOICE (microphone)
Activate in-built microphone to extend delay time during lights on without additional movement detection or visual contact (max. 10 seconds after lights switch off). Each detected noise re-triggers set delay time. Middle position detects normal talking volume; maximum setting detects whispers.

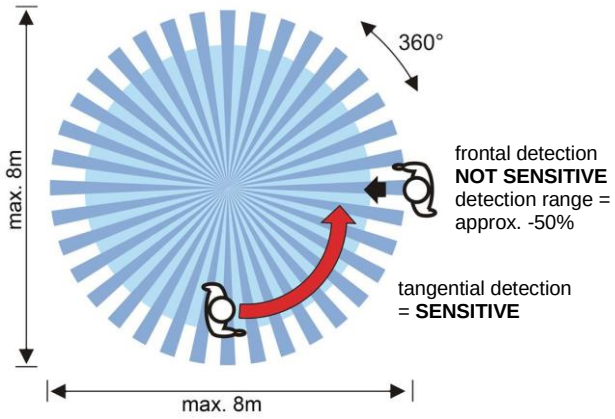
TIME
Set up delay time for lights on time period after last movement detection. Choose between impulse function for staircase switches, 30s, 1m, 3m, 5m, 10m, 20m, 30m.

LUX (twilight sensor)
Controls light value from which motion detection triggers lights on. Moon symbol = activation at night; sun symbol = activation during daytime. TEST = detection area check with short delay time.

SENS (sensitivity/detection range)
Detection range adjustment max = approx. 8 m diameter.

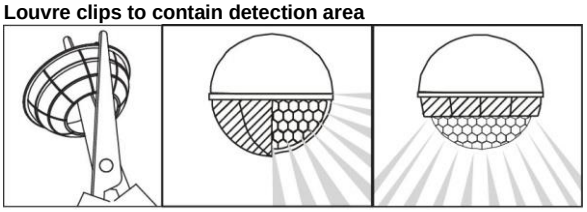
Connection of electrical loads
High inrush currents will considerably shorten the lifetime of the detector's in-built relay. Please verify the technical data provided by the lamp or luminaires manufacturer concerning inrush currents, specifically with compact fluorescent, fluorescent lamps, electronic ballast, etc. in order not to overload the internal relay. We recommend connecting a maximum of three to four motion detectors in parallel. If the number of switching cycles is above average or in the event of increased (inductive) loads, we recommend using the short pulse function on the motion detector and switching the load via an external staircase timer switch or contactor.

Detection Range



The 360° omnidirectional detection zone and the dense detection field guarantee an optimal function. The range depends on the installation height and walking direction (high sensitivity when cutting or changing a switching segment). Since the detector reacts to temperature differences between heat source and ambient temperature, the response may vary depending on the installation site (floor heating, hot environment, etc.).

Louvre clips to contain detection area



Troubleshooting

error	**cause/amendment**
light does not turn on:	- twilight adjustment value set too low - check light fitting and lamp - check mains power / fuses
detector triggers without reason/light never turns off:	- check detection area for errors: draught, animals, heating may cause faulty switching! - detector is too sensitive, reduce sensitivity, contain detection area with louvre clips - check distances to lamps (heat reflection or direct light influence) - check vicinity for background noise and adjust microphone sensitivity - connect RC element in parallel to transformers, relays, electric ballast
turns the light on during daytime:	- twilight adjustment set too high

Electronic Control
Induction in long installation wires (if several detectors connected in parallel) may generate a considerable capacitive current on the switched phase. For electric loads using only a small control current, such as staircase timer switches, this may lead to permanent switching or general malfunctions. In order to minimise the capacitive current, an RC element may be connected in parallel to the load. Alternatively, a contactor, which is more tolerant to capacitive currents, may be installed before the load. We recommend a maximum of four detectors connected in parallel.

Do not dispose of electrical appliances in your waste bin, use the collecting point of your municipality, or return the old device to your dealer.

Technical Data

Nominal power:	230V/50Hz	Twilight switch:	approx. 5-1000 Lux
Switching power:	max. 1000W / 5A (cos φ = 1) max. 250VA / 1.25A inductive	Detection area:	360° / Ø 8 m
		Dimensions:	Ø 143 x 70 mm
Time adjustment:	impulse, 30 s to 30 min.	IP protection:	IP20 indoors / class II
Microphone:	adjustable approx. 50 to 70 dB		

Züblin

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